

Fig. 1. Conceptual Block Diagram of XTCQM Transmitter

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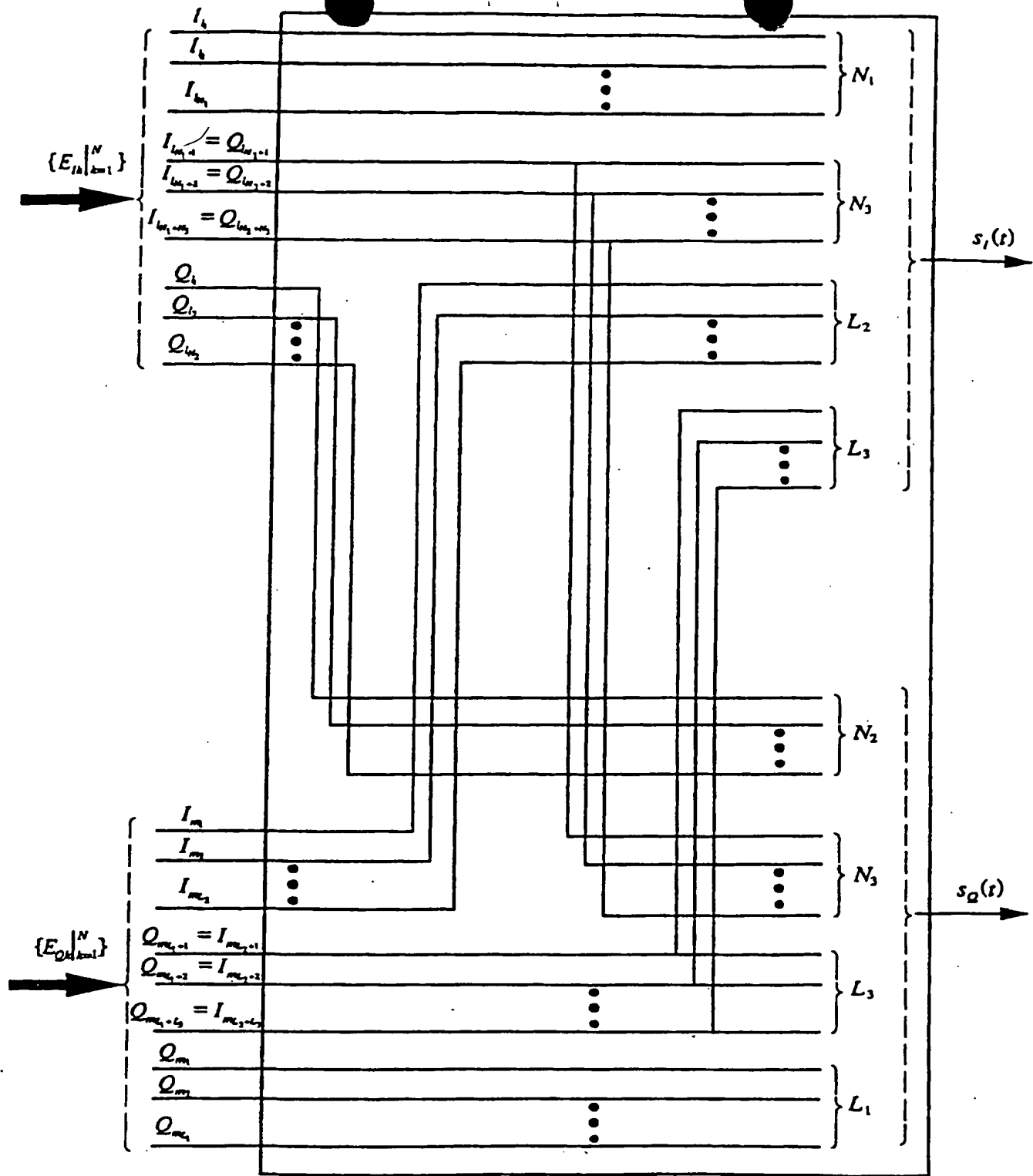


Fig. 2. Crosscorrelation Mapper

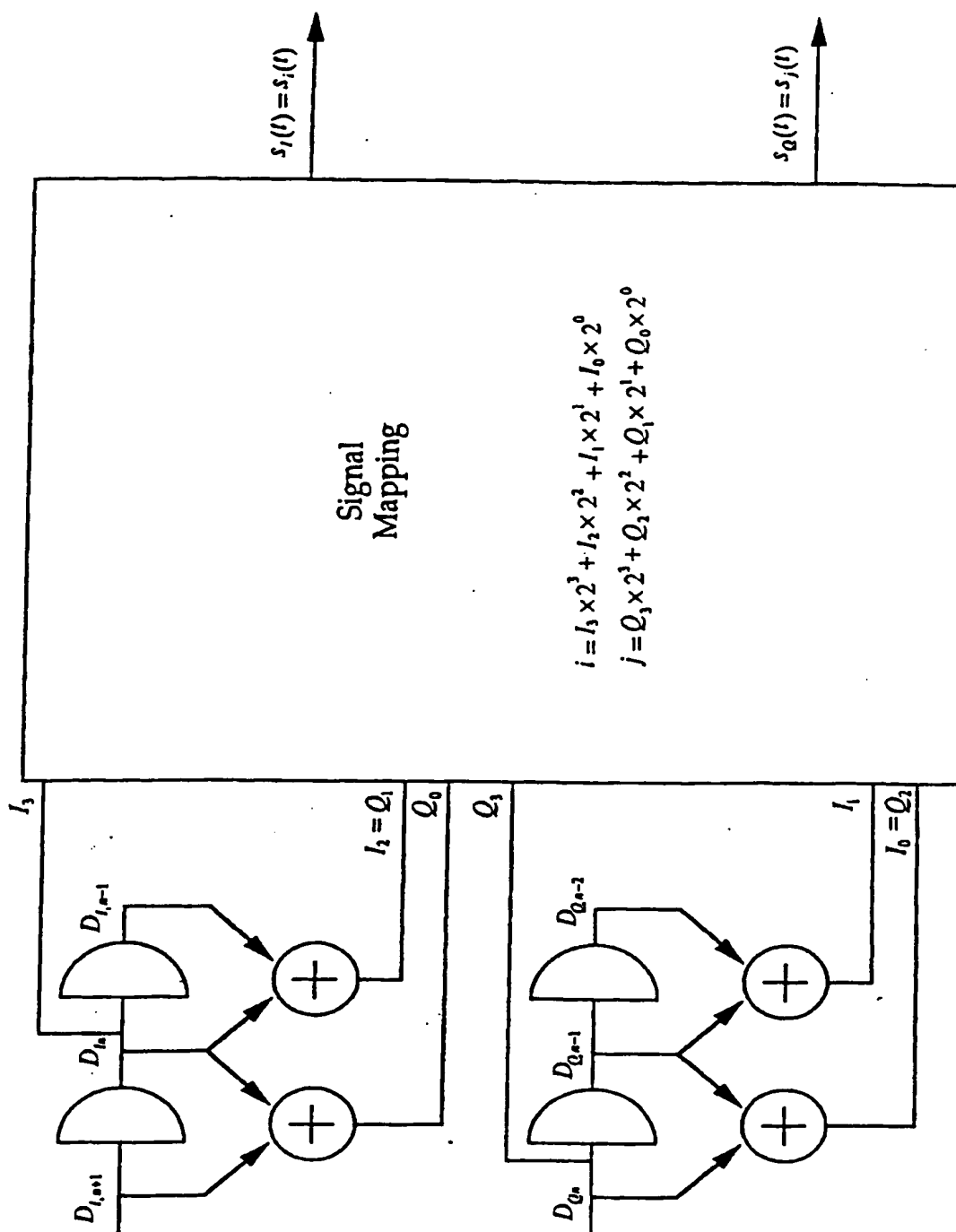


Fig. 3. XPSK (FQPSK) Embodiment of XTCQM Transmitter

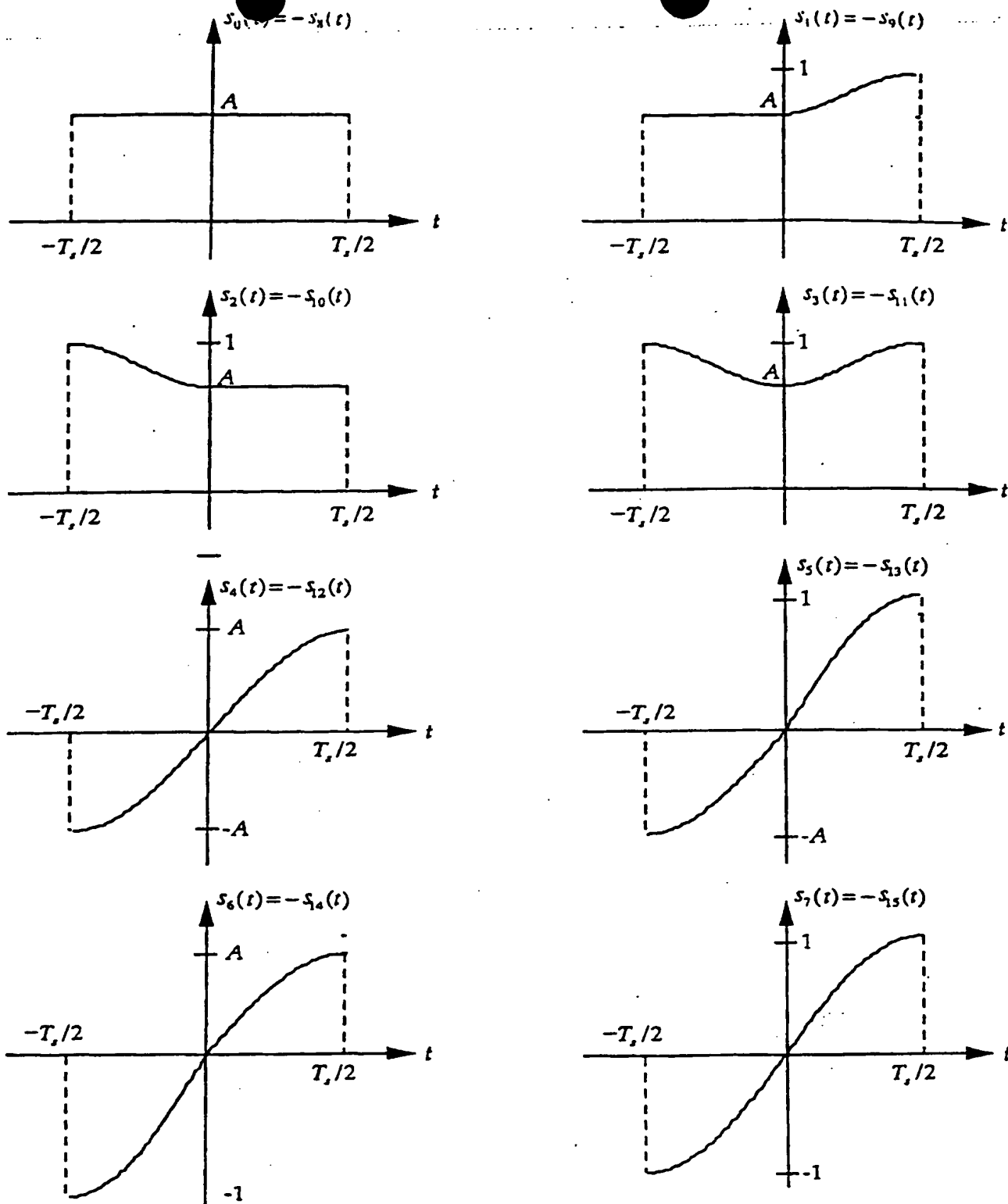


Fig. 4. FQPSK Full Symbol Waveforms

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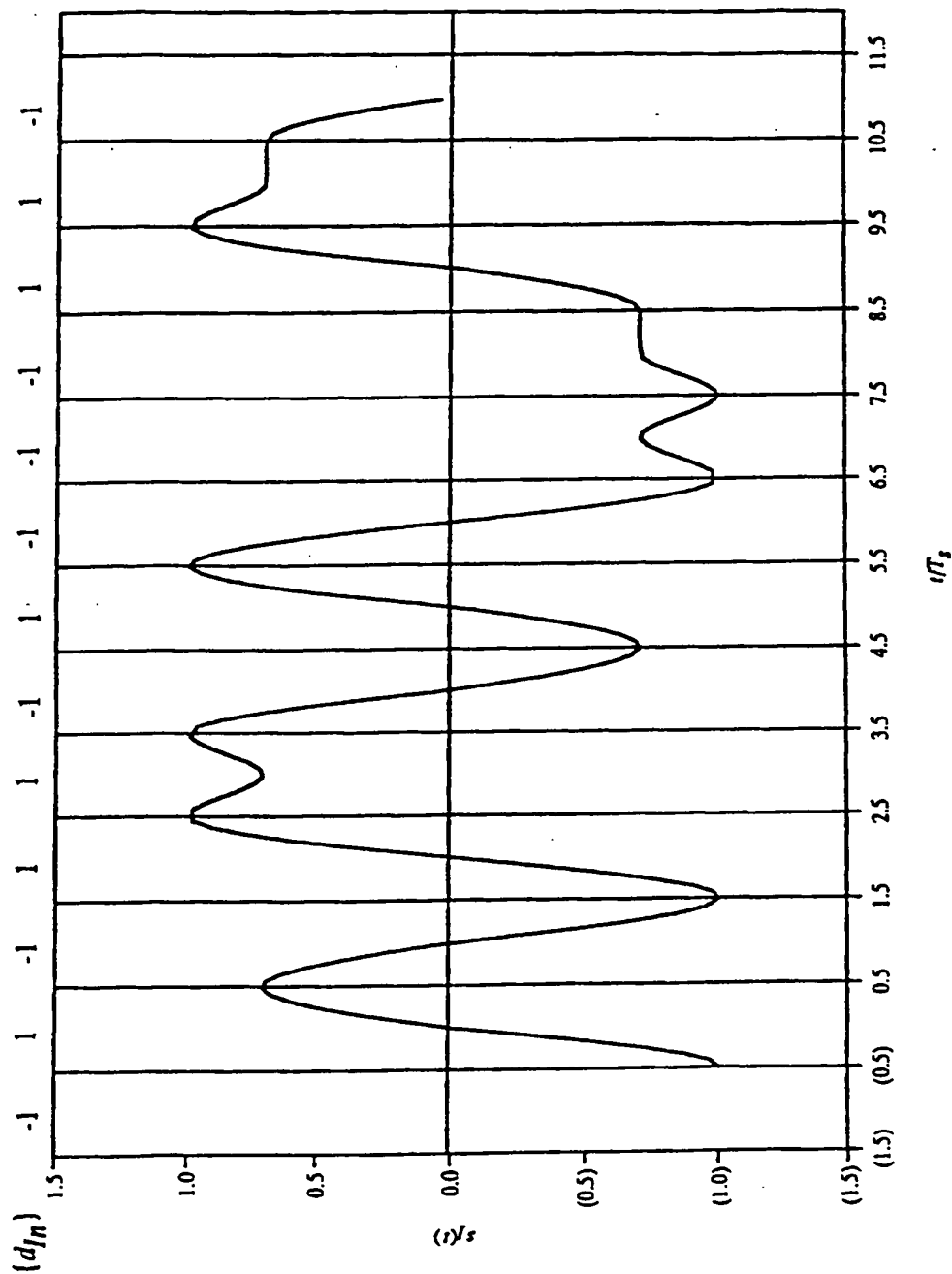


Fig. 6a. InPhase FQPSK (XPSK) Output

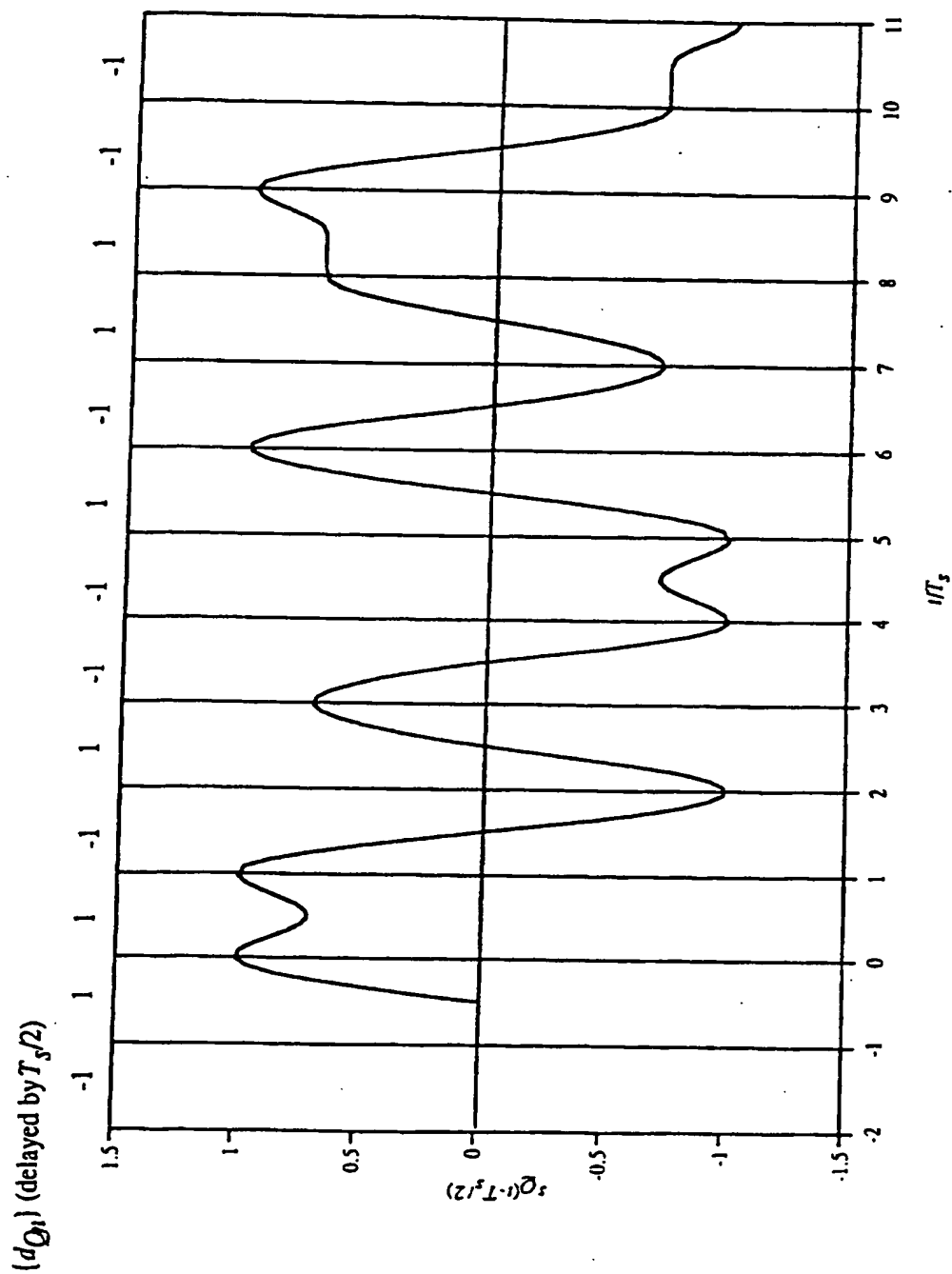


Fig. 6b. Quadrature Phase FQPSK (XPSK) Output

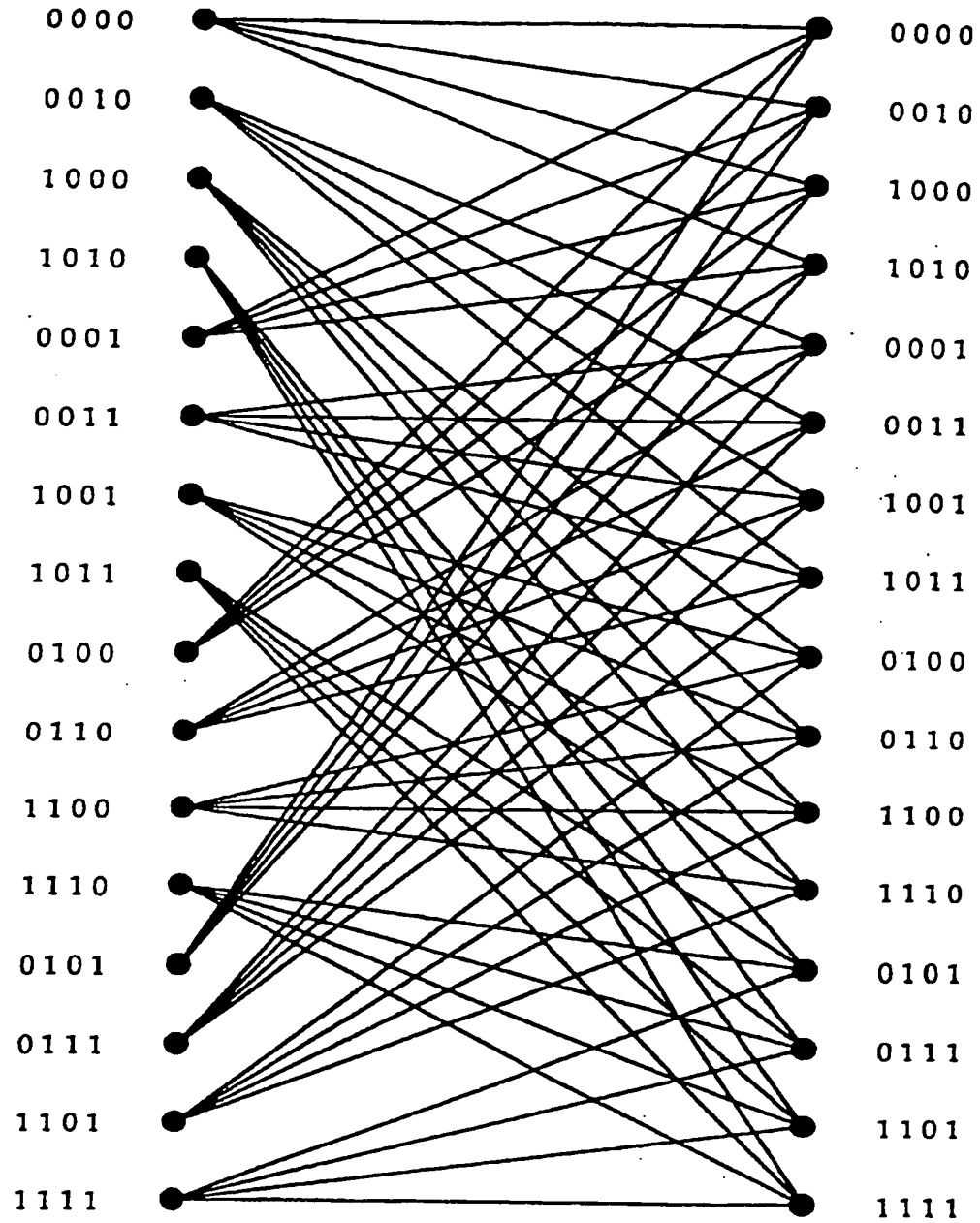
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Fig. 7. 16-State Trellis Diagram for FQPSK

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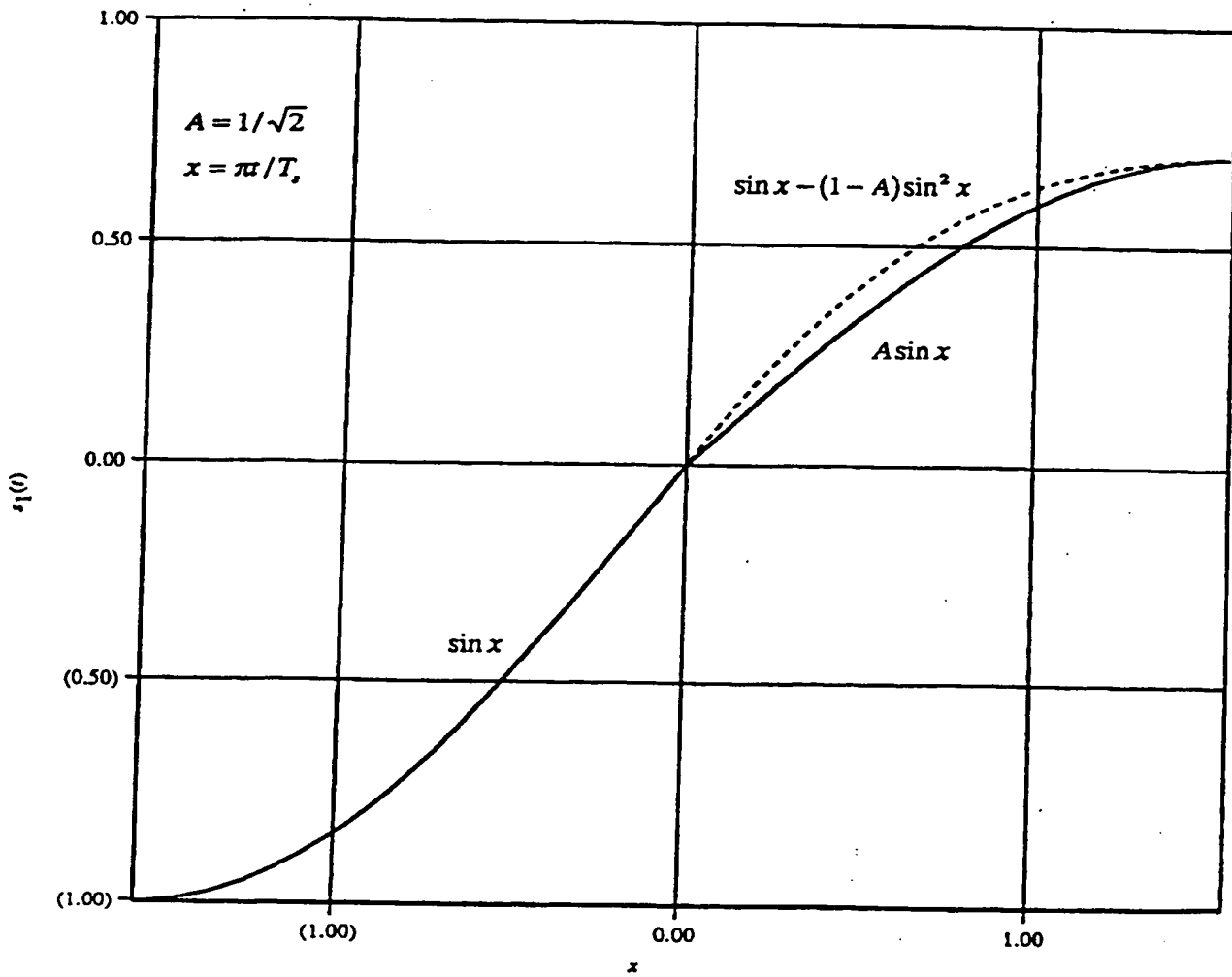


Fig. 8. Original and New FQPSK Pulse Shapes



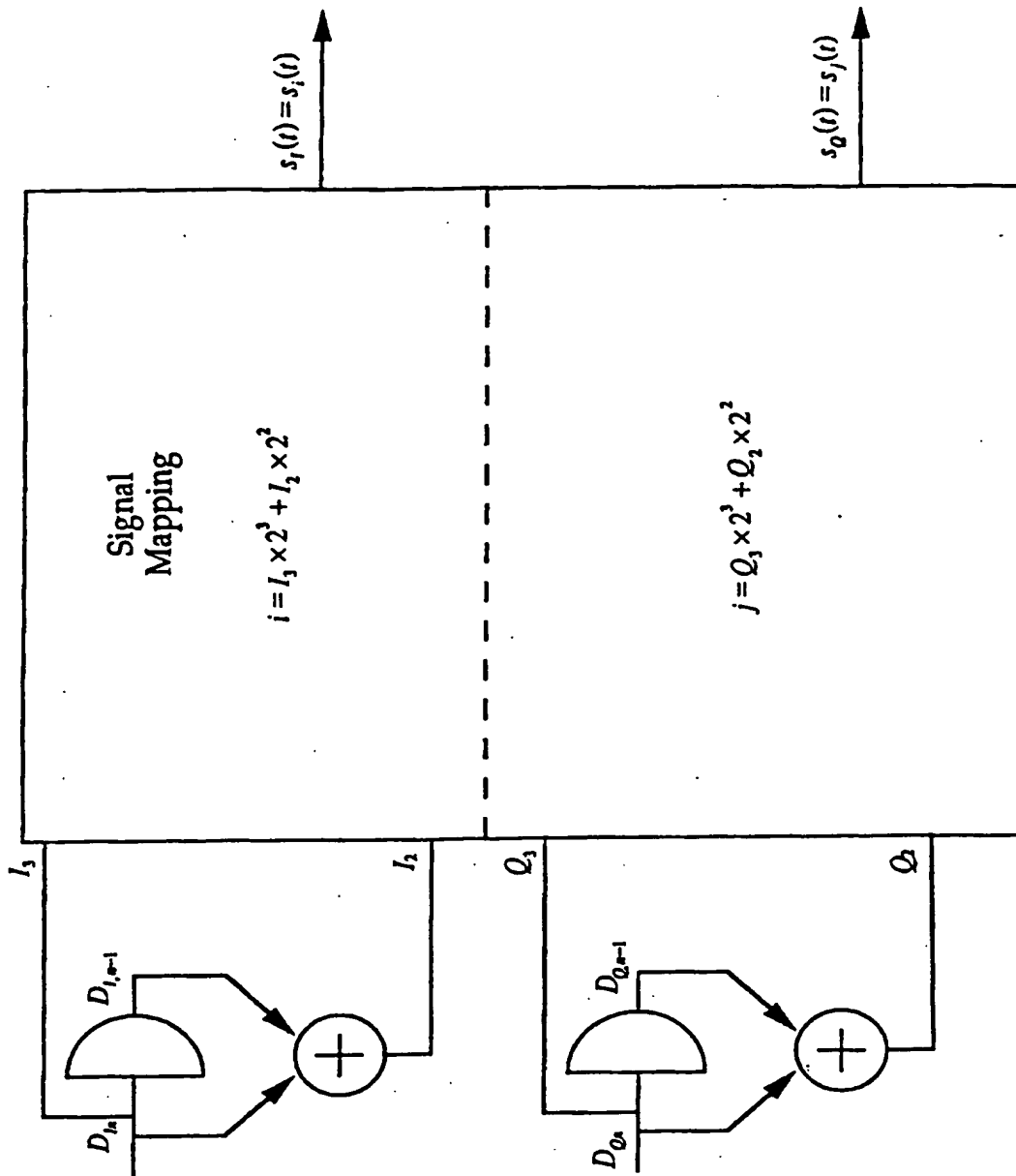


Fig. 10. Trellis Coded OQPSK Embodiment of XTCQM Transmitter

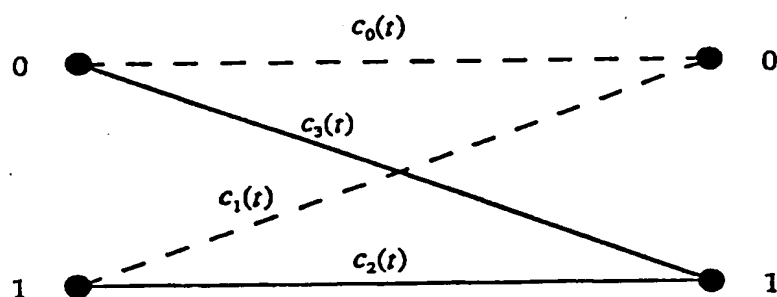


Fig. 11. 2-State Trellis Diagram for OQPSK

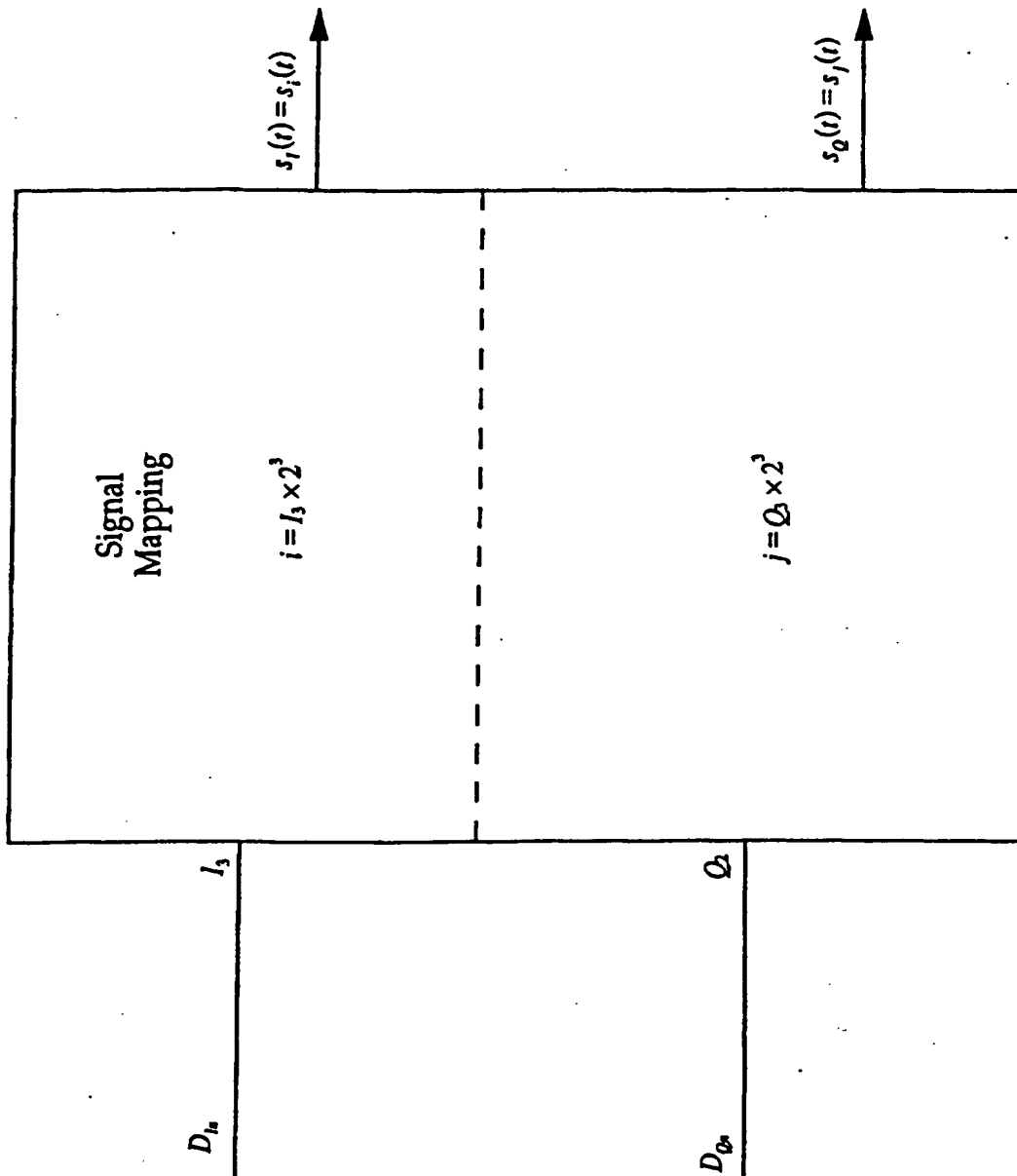


Fig. 12. Uncoded OQPSK Embodiment of XTCQM Transmitter with NRZ Data Formatting

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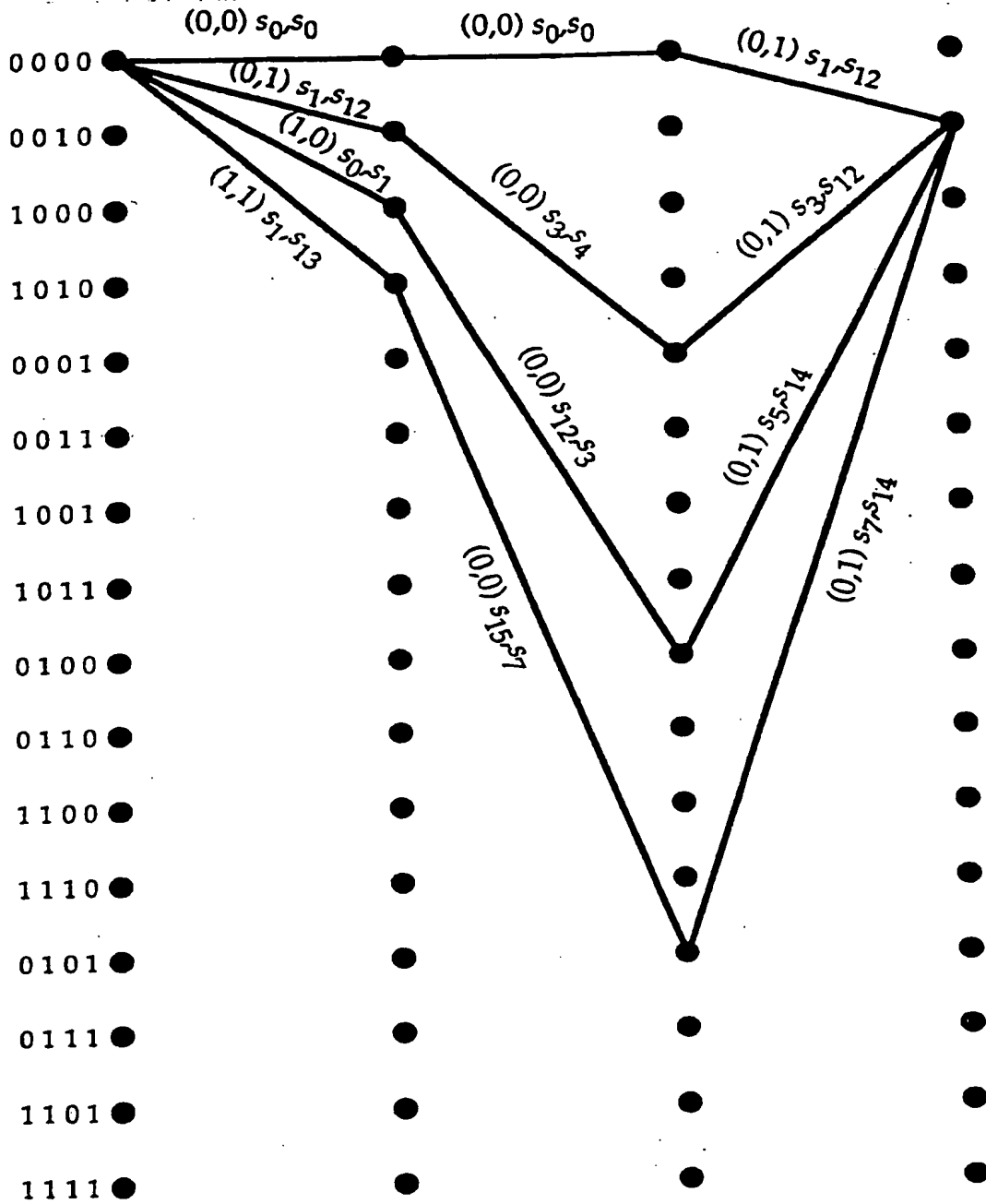


Fig. 13. Paths of Length 3 Branches Starting in State 1 and Ending in State 2

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